

AMENDMENTS TO THE CLAIMS

1. (currently amended) A light-emitting semiconductor device having a Group III nitride compound semiconductor comprising:

a surface layer made of p-type conduction;
an electrode layer formed on said surface layer; and
an electrode pad comprising:

a first metal layer formed on said electrode layer formed on said surface layer,
a second metal layer formed on said first metal layer, and a third metal layer formed on said second metal layer; and

a protective film over said third metal layer and entirely of said electrode layer,
said protective film leaving exposed a central portion of said third metal layer; said electrode layer being capable of passing an emitted light;

said electrode pad being capable of supplying a current to said electrode layer; and

wherein said second metal layer is made of gold (Au), said first metal layer comprises ~~a material that has an ionization potential lower than gold (Au)~~ at least one of iron (Fe), copper (Cu), chromium (Cr), tantalum (Ta), vanadium (V), manganese (Mn), aluminum (Al), and silver (Ag), and said third metal layer comprises aluminum (Al) that has an adhesiveness to said protection film which is stronger than gold (Au) and etching an inner side of said protective film is prevented when a portion of said protective film corresponding to said central portion is etched and said protective film is left on an upper surface of said third metal layer except for said central portion.

2. (currently amended) The light-emitting semiconductor device according to claim 1, wherein said material of said first metal layer includes at least one of ~~nickel (Ni), iron (Fe), copper (Cu), chromium (Cr), tantalum (Ta), vanadium (V), manganese (Mn), aluminum (Al), and silver (Ag)~~ vanadium (V) and chromium (Cr).

3. (canceled)

4. (previously amended) The light semiconductor device according to claim 1, wherein

said protection film is made of silicon oxide (SiO_2).

5. (canceled)

6. (previously amended) The light-emitting semiconductor device according to claim 1, wherein said electrode layer has a multi-layer structure having at least a first electrode layer formed on said surface layer and a second electrode layer formed on said first electrode layer, wherein said first electrode layer comprises material having an ionization potential that is lower than that of said second electrode layer, said material of said second electrode layer, has an ohmic characteristic to said surface layer better than that of said first electrode layer, and said material of said second electrode layer being distributed more deeply into said surface layer than that of said first electrode layer by heat treatment.

7. (previously amended) The light-emitting semiconductor device according to claim 6, wherein said material of said first electrode layer includes at least one of nickel (Ni), iron (~~Fe~~) (Fe), copper (Cu), chromium (Cr), tantalum (Ta), vanadium (V), manganese (Mn), aluminum (Al), and silver (Ag), and said material of said second electrode layer includes at least one of palladium (Pd), gold (Au), iridium (Ir), and platinum (Pt).

8. (previously amended) The light-emitting semiconductor device according to claim 6, wherein said material of said first electrode layer is nickel (Ni) and said of said second electrode layer is gold (Au).

9. (previously amended) The light-emitting semiconductor device according to claim 6, wherein said heat treatment is carried out in the range of 400°C to 700°C.

10. (previously amended) The light-emitting semiconductor device according to claim 1, further comprising:

semiconductor layers having Group III nitride compound semiconductor and satisfying the formula, $\text{Al}_x\text{Ga}_y\text{In}_{1-x-y}\text{N}$, wherein $0 < x < 1$, $0 < y < 1$, and $0 < x + y < 1$ $0 < x < 1$, $0 < y < 1$, and $0 < x + y < 1$.

11. (previously amended) The light-emitting semiconductor device according to claim 10, wherein said device is one of a light-emitting diode (LED) and a light-emitting laser diode (LD).

12-14. (canceled)

15-19. (withdrawn)

20. (previously amended) The light-emitting semiconductor device according to claim 6, wherein materials of said second electrode layer do not permeate into said first electrode layer directly under said electrode pad, which enables the interface between said electrode layer and said surface layer directly under said electrode pad to have a large resistivity and not have electric current pass therethrough.

21-31. (canceled)